

1           1.       A tire dressing composition, comprising a silicone microemulsion and a wetting  
2 agent.

1           2.       The tire dressing composition of claim 1, wherein the silicone microemulsion  
2 comprises amino functional silicone fluids having viscosities ranging from about 40 cSt to  
3 500,000 cSt at room temperature.

1           3.       The tire dressing composition of claim 1, wherein the silicone microemulsion  
2 comprises silicone-based polymers and more preferably, emulsifiable silicone-based polymers.

1           4.       The tire dressing composition of claim 1, wherein the silicone microemulsion  
2 comprises silicone fluids with functionalities other than the amine functionality having  
3 viscosities ranging from about 40 cSt to 500,000 cSt at room temperature.

1           5.       The tire dressing composition of claim 1, further comprising surfactants and  
2 cosurfactants having interfacial functionalities to emulsify the silicone compounds of said  
3 composition.

1           6.       The tire dressing composition of claim 1, wherein the wetting agent reduces the  
2 surface tension of the tire dressing.

1           7.       The tire dressing composition of claim 6, wherein the wetting agent is selected  
2 from the group consisting of nonionic polymeric fluorochemical wetting agents, anionic  
3 phosphate fluorosurfactants, anionic lithium carboxylate fluorosurfactants, nonionic ethoxylated  
4 fluorosurfactants, polyether modified polydimethylsiloxane wetting agents, polyalkyleneoxide  
5 modified heptamethyltrisiloxane wetting agents, and organomodified polysiloxane blend wetting  
6 agents.

1           8.       The tire dressing composition of claim 1, further comprising an antifoaming  
2 agent.

1           9.       The tire dressing composition of claim 8, wherein the antifoaming agent is  
2 selected from the group consisting of silica-filled polydimethyl siloxane, polyether modified  
3 polysiloxane, and a mixture of foam destroying polymers and hydrophobic solids (polyureas).

1           10.      The tire dressing composition of claim 1, further comprising a propellant.

1           11.      The tire dressing composition of claim 10, wherein the propellant is selected from  
2 the group consisting of non-flammable propellants such as 1,1,2,2-tetrafluoroethane, 1,1-  
3 difluoroethane, 1,1,1-trifluoroethane, difluoromethane, 1,1,-difluoro-2,2,2-trifluoroethane, and  
4 1,1,1,2-tetrafluoroethane.

1           12.     The tire dressing composition of claim 1, further comprising a corrosion inhibitor.

1           13.     The tire dressing composition of claim 12, wherein the corrosion inhibitors are  
2 selected from the group consisting of triethanolamine dinonylnaphthalene, boric acid-  
3 triethanolamine salt, phosphoric acid-triethanolamine salt, ammonia, triethanolamine,  
4 capryloamphopionate, and mixtures thereof.

1           14.     The tire dressing composition of claim 1, further comprising a freezing point  
2 depressant.

1           15.     The tire dressing composition of claim 14, wherein the freezing point depressants  
2 are selected from the group consisting of ethylene glycol and propylene glycol.

1           16.     The tire dressing composition of claim 1, wherein the tire dressing composition is  
2 stored in a PVC plastic bottle.

1           17.     The tire dressing composition of claim 1, wherein the tire dressing composition is  
2 stored in a PET plastic bottle.

1           18.     The tire dressing composition of claim 1, wherein the tire dressing composition is  
2 stored in an aerosol can.

1           19.     The tire dressing composition of claim 1, wherein the tire dressing composition is  
2 a sprayable product.

1           20.     The tire dressing composition of claim 1, wherein the tire dressing composition is  
2 a gel-based product.

1           21.     The tire dressing composition of claim 20, wherein the gel-based product  
2 comprises pigments and glitter particles.

1           22.     A method of forming a durable, shiny, water repellant coating on a tire, comprising:  
2                 applying a tire-dressing composition to a surface of a tire, the tire-dressing  
3 composition comprising a silicone microemulsion.

1           23.     The method of claim 22, wherein the composition further comprises a wetting  
2 agent.

1           24.     The method of claim 22, wherein the silicone microemulsion comprises amino  
2 functional silicone fluids having viscosities ranging from about 40 cSt to 500,000 cSt at room  
3 temperature.

1           25.     The method of claim 22, wherein the silicone microemulsion comprises silicone-  
2 based polymers and more preferably, emulsifiable silicone-based polymers.

1           26.     The method of claim 22, wherein the silicone microemulsion comprises silicone  
2 fluids with functionalities other than the amine functionality having viscosities ranging from  
3 about 40 cSt to 500,000 cSt at room temperature.

1           27.     The method of claim 22, further comprising surfactants and cosurfactants having  
2 interfacial functionalities to emulsify the silicone compounds of said composition.

1           28.     The method of claim 22, wherein the wetting agent reduces the surface tension of  
2 the tire dressing.

1           29.     The method of claim 28, wherein the wetting agent is selected from the group  
2 consisting of nonionic polymeric fluorochemical wetting agents, anionic phosphate  
3 fluorosurfactants, anionic lithium carboxylate fluorosurfactants, nonionic ethoxylated  
4 fluorosurfactants, polyether modified polydimethylsiloxane wetting agents, polyalkyleneoxide  
5 modified heptamethyltrisiloxane wetting agents, and organomodified polysiloxane blend wetting  
6 agents.

1           30.     The method of claim 22, further comprising an antifoaming agent.

1           31.     The method of claim 30, wherein the antifoaming agent is selected from the group  
2 consisting of silica-filled polydimethyl siloxane, polyether modified polysiloxane, and a mixture  
3 of foam destroying polymers and hydrophobic solids (polyureas).

1           32.     The method of claim 22, further comprising a propellant.

1           33.     The method of claim 32, wherein the propellant is selected from the group  
2 consisting of non-flammable propellants such as 1,1,2,2-tetrafluoroethane, 1,1-difluoroethane,  
3 1,1,1-trifluoroethane, difluoromethane, 1,1,-difluoro-2,2,2-trifluoroethane, and 1,1,1,2-  
4 tetrafluoroethane.

1           34.     The method of claim 22, further comprising a corrosion inhibitor.

1           35.     The method of claim 34, wherein the corrosion inhibitors are selected from the  
2 group consisting of triethanolamine dinonylnaphthalene, boric acid-triethanolamine salt,  
3 phosphoric acid-triethanolamine salt, ammonia, triethanolamine, capryloamphopronate, and  
4 mixtures thereof.

1           36.     The method of claim 22 further comprising a freezing point depressant.

1           37.     The method of claim 36, wherein the freezing point depressants are selected from  
2 the group consisting of ethylene glycol and propylene glycol.